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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/336,741	06/21/1999	SHERMAN CHING MA	X/P6396US0	8007

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ALEXANDRIA, VA 22314

EXAMINER

HEWITT II, CALVIN L

ART UNIT	PAPER NUMBER
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3621

DATE MAILED: 03/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/336,741

Applicant(s)

CHING, SHERMAN

Examiner

Calvin L Hewitt II

Art Unit

3621

ML

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Status of Claims

1. Claims 1-48 have been examined.

Response to Amendments

2. The Applicant has amended the claims to include limitations the Applicant feels are able to overcome the prior art. The Examiner respectfully disagrees as these newly added features are present in the teachings of Norris, Fraser et al., and Hartman et al..

Specifically the prior art teaches:

1. *computing means "to store or access data indicative of all application approval criteria associated with said application, where at least some of said all application approval criteria are not stored as one or more forms"*

Norris teaches a neural network evaluating a submitted application using data that is not stored as one or more forms (column 6, lines 20-45)

2. *presenting application forms to an applicant where, "each of said forms pertaining to a respective selection of said application approval criteria"*

Norris teaches a user providing loan information, such as name, social security number, and loan amount, via a form so that the system will in turn use

to evaluate said user's loan application (column 4, lines 35-48; column/line 7/55-8/15). Hartman et al. also teach a user providing data to a computer using an electronic form (figures 8A-C).

3. *a visual display means for displaying said forms to said applicant, wherein each of said forms when presented to said applicant on said visual display means comprises a plurality of requests for information and a plurality of data entry fields, each of said data entry fields, each of said data entry fields associated with a respective one of said requests for information*

To one of ordinary skill this is just a form (Norris- column 4, lines 35-48; column/line 7/55-8/15; Hartman et al.- figures 8A-C).

4. *to construct a second form pertaining to a respective selection from said all application approval criteria where said respective selection is made by said computing means from said all application approval criteria*

Norris teaches a user providing loan information, such as name, social security number, and loan amount, via a form so that the system will in turn use to evaluate said user's loan application (column 4, lines 35-48; column/line 7/55-8/15). Hartman et al., disclose a verification system for ensuring the accuracy of submitted information comprising, after completing a first form, the system constructs and presents second, and subsequent forms containing subsequent information, on the basis of information provided by an applicant in the first form and an applicant sending these forms to a remote system (figure 1A; column 4,

lines 44-58; column 9, lines 25-53). To one of ordinary skill it would have been obvious to include this feature as part of the application approval criteria in the teachings of Norris in order to ensure the accurate retrieval other evaluation data such as a credit report ('721, column 4, lines 35-48).

5. *to construct subsequent forms pertaining to one or more respective selections from said all application approval criteria where each of said one or more respective selection is made by said computing means from said all application approval criteria on the basis of at least some of the criteria provided*

This is feature is taught by Hartman et al. as their system for producing subsequent forms is based on errors in a previously submitted form (column 9, lines 35-45).

The other features of presenting a form to an applicant and transmitting said form to a system for evaluation ('721, column/line 7/55-8/14; '411, figures 8A-C), providing sufficient data entry fields in one, second and subsequent forms to constitute a completed application ('721, column/line 7/55-8/14; '411, figures 8A-C) and avoiding the presentation of unnecessary information ('411, figures 8A-C) is also taught by the prior art.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-18, 20-27, 31-34, 39-44 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norris, U.S. Patent No. 5,870,721 in view of Fraser et al., U.S. 5,995,947 and Hartman et al. U.S. Patent No. 5,960,411.

As per claims 1-18, 20-27, 31-34, 39-44 and 48, Norris teaches a loan processing system that:

- allows applicants to input data into a system (figure 1; column 2, lines 51-65; column/line 7/55-8/10)
- sends the data (i.e. completed application) over a communications network (column/line 7/55-8/10)
- allows lenders to view and analyze the data in order to make a decision on the application (column/line 6/21-7/4; column/line 7/55-8/10; column 8, lines 10-54)

- provides an applicant with the status or an assessment of the application (column/line 6/21-7/4; column/line 7/55-8/10; column 8, lines 28-53)
- display means (figure 1, item 34; column 6, lines 46-67; column/line 7/55-8/10)
- obtains additional information from external sources purposes of analyzing the applicant's data (figure 1, items 14 and 16; column 4, lines 48-56; column 6, lines 46-51; column 7, lines 55-65)
- uses a neural network to render a decision as to whether or not to grant a loan to an applicant (column 6, lines 20-50; column 8, lines 10-60)
- allows an application to be rejected based on partial analysis (column 8, lines 1-10)

Norris teaches that an applicant can request assistance (column 7, lines 46-54) and that a lender can assist an applicant (column 8, lines 15-22). Therefore, it would have been at least obvious for one of ordinary skill of the art to allow the lender providing assistance to view the inputted data in order to better help the applicant. Also, as Norris teaches that his system can be implemented on a PC it would have been obvious to provide software so that it can be run from home or office, or loaded onto computer memory to allow for public access to the system (e.g. kiosk) (figures 2 and 3; column 8, lines 10-21). The system of Norris asks questions of an applicant for purposes of gathering data in order to make a decision, it would have been obvious for a neural network designer to modify the

question asking procedure for purposes of improving neural network analysis ('721, column 6, lines 3-48; column/line 7/66-8/54) and/or reduce the number of inconclusive judgments ('721, column 8, lines 22-28). Norris does not explicitly recite presenting subsequent forms to users. Hartman et al. teach a data entry system consisting of a plurality of electronic forms with data control (abstract; figures 1A-2, 8A-C). Hartman et al. also teach a method for allowing a user to complete an application through the optimization of electronic form processing, by providing a sequence of forms to a user, where the requesting of unnecessary information in these forms is avoided (figures 1C, 3, 4, figures 8A-C; column 2, lines 59-67; column 4, lines 35-58; column 5, lines 8-26; column 7, lines 3-23; column 9, lines 8-53). In particular, Hartman et al., disclose, after completing a first form, the system constructing and presenting second, and subsequent forms containing subsequent information, on the basis of information provided by an applicant in the first form and an applicant sending these forms to a remote system (figure 1A; column 4, lines 44-58; column 9, lines 25-53). Regarding unnecessary information, neither Norris nor Hartman in their respective application processes require users to input that is unrelated to the application. Hartman et al. also teach optimizing the number of questions asked a user as once an error has been detected, uneditable fields are presented to the user to prevent the user from changing correct information. Regarding "defects", Hartman et al. teach a system for detecting "errors", therefore as this feature is

not inherent to a computer and has to be programmed, a decision has to be made as to what is an error. Hence, a "defect" such as not capitalizing a name can be ignored by the system. Therefore, it would have been obvious to one of ordinary skill to combine the teachings of Norris and Hartman et al. in order to ensure efficient and accurate loan form processing.

5. Claims 19, 28-30, 35-38 and 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norris, U.S. Patent No. 5,870,721 and Hartman et al. U.S. Patent No. 5,960,411 as applied to claim 16 above and in further view of Fraser et al., U.S. 5,995,947.

As per claim 19, Norris teaches an automated loan processing system (abstract), while Hartman et al. teach a system for presenting subsequent forms to users when an error is detected in a previously submitted form (figures 8A-C). However, neither Norris nor Hartman et al. specifically recite bids. Fraser et al. teach an interactive loan trading system where a loan application can be modified ('947, column 3, lines 46-53; column 8, lines 24-28) and is accessible and selectively presented on remote lender computers in order for lenders to select, review and bid on loan applications (i.e. assessing applications based on approval criteria of each lender) ('947, figure 1; column 2, lines 21-31; column 7, lines 5-20; column 12, lines 26-67; column 13, lines 3-8 and 34-48). Fraser et al.

also allow bids to be accepted (column 13, lines 42-47). Therefore, it would have been obvious to combine the teachings of Norris, Fraser et al. and Hartman et al. in order to provide borrowers with the best financial product given the borrower's loan criteria by subjecting the borrower's loan application to competitive forces ('947, abstract).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Calvin Loyd Hewitt II whose telephone number is (703) 308-8057. The Examiner can normally be reached on Monday-Friday from 8:30 AM-5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, James P. Trammell, can be reached at (703) 305-9768.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

c/o Technology Center 2100

Washington, D.C. 20231

or faxed to:

Art Unit: 3621

(703) 305-7687 (for formal communications intended for entry and after-final communications),

or:

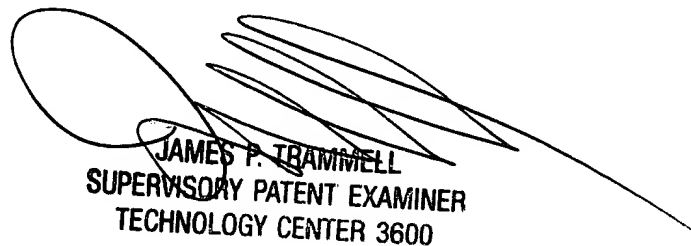
(703) 746-5532 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park 5,
2451 Crystal Drive, 7th Floor Receptionist.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

Calvin Loyd Hewitt II

March 14, 2004



JAMES P. TRAMMELL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600